Cabo Verde - Water, Sanitation, and Hygiene

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Overview

Identification

COUNTRY
Cabo Verde

EVALUATION TITLE
Water, Sanitation, and Hygiene

ID NUMBER
DDI-MCC-CV-MPR-WASH-2020-v01

Version

VERSION DESCRIPTION
508-compliant version of interim evaluation report

Overview

ABSTRACT
The mixed-methods performance evaluation of the WASH Project as a whole and of its different activities includes the following three components:

1) A process evaluation, which will document how the project activities were implemented and explore the potential for the activities to have contributed to changes in key outcomes from the project logic. The process evaluation will draw from primary qualitative data collected from national and local stakeholders and households on several islands in 2018 and 2021, a review of project documents, and administrative data provided by government agencies and Águas de Santiago (AdS), a new corporatized, multi-municipal water utility for the island of Santiago.

2) Pre-post analyses of household survey data and secondary data from utilities (including AdS), which will explore changes in outcomes on the island of Santiago in the first few years after the project activities are completed.

3) Case studies of three infrastructure projects funded by the project's Water and Sanitation Fund (FASA), on the islands of Santiago, Sal, and São Vicente, which will explore potential commonalities and unique aspects of projects that represent the broader portfolio. The two rounds of case studies will synthesize

information from all of the data sources used in the other two components of the evaluation, with additional primary qualitative data related specifically to these three projects.

The evaluation of the WASH project seeks to answer the following questions proposed by MCC:

1. Were the Activities/Sub-Activities implemented as designed? What were implementation challenges and successes?

2. How did the political and economic incentives of different sector actors affect the implementation, sustainability, and efficacy of the WASH project? In particular, how did these incentives affect the reform portfolio, and the effects of the WASH project on customers, utilities, and the management efficiency of the sector?

3. a) Has the FASA mechanism efficiently selected the most effective, high quality projects as measured by the effects of the FASA projects on the socioeconomic well-being of households, the finances and management of the utilities, economy value-added and business and household productivity? b) Is the FASA a sustainable institution in Cabo Verde that is and will catalyze additional financing for WASH infrastructure?

4. a) Is the new tariff for AdS pro-poor (progressive), regressive, or neutral? b) Does the new tariff structure allow for cost-recovery by AdS?

5. Is there evidence that the interventions have resulted in the outcomes outlined in the program logic?

6. Was the WASH project as a whole effective at increasing the management efficiency and sustainability of the sector as

measured by non-revenue water, collection ratio, and tariff adequacy? At reducing the (implicit) subsidy to the WASH sector at the municipal and national level?

7. What has been the effect of the WASH project on access to, quality and continuity of, and total costs of (direct and indirect) water and sanitation services for households and businesses in Cabo Verde? On gender and social equality in access to and cost of water and sanitation services?

8. How do the FASA and the Social Access Fund for Water and Sanitation Connection (FAS) projects' effects on these outcomes compare?

More details can be found in the evaluation design report: Null, Clair, Audrey-Marie Moore, Edith Felix, and Chantal Toledo. "The Water, Sanitation, and Hygiene (WASH) Project in Cabo Verde: Evaluation Design Report." Report submitted to the Millennium Challenge Corporation, Washington, DC: Mathematica Policy Research, January 2018.

TOPICS

Topic	Vocabulary	URI
Water and sanitation		
WASH		
Cabo Verde WASH		
Africa		

KEYWORDS
Water, Sanitation, Water and sanitation, WASH, Performance evaluation, Cabo Verde

Coverage

GEOGRAPHIC COVERAGE
The National Insitutional and Regulatory Reform (NIRR) consists of institutional and regulatory reform activities at the national level, so the entire population of Cabo Verde benefits from this activty.

The Utiity Reform Activity (URAA) benefits the entire population of the island of Santiago, which is served by the new corporatized utility in the island. The WASH project is also supporting technical assistance for the corporatization of the water and sanitation department on the island of Maio, so the URA also benefits the population of Maio.

The Water and Sanitation Fund (FASA) projects provide funding on a competative basis for water and sanitation utilities nationwide to improve or expand their infrastructure.

The Social Access Fund for Water and Sanitation Connection (FAS) projects were implemented on the islands of Santiago, São Vicente, and Santo Antão. FAS projects funded household water connections for almost 3,000 households, water connections and improved sanitation for over 600 households, and improved sanitation for almost 800 households.

Producers and Sponsors

PRIMARY INVESTIGATOR(S)

Name	Affiliation
Mathematica	

FUNDING

Name	Abbreviation	Role
Millennium Challenge Corporation	MCC	

Metadata Production

METADATA PRODUCED BY

Name	Abbreviation	Affiliation	Role
Mathematica			Independent Evaluator

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MCC Compact and Program

COMPACT OR THRESHOLD
Cabo Verde Compact II

PROGRAM
MCC's $66.2 million Cabo Verde Compact II (2012-2017) funded the $41.1 million Water, Sanitation, and Hygiene (WASH) Project. The project aimed to improve service delivery and increase households' access to piped water and sanitation by strengthening the institutional and regulatory environment; creating a new, financially sustainable corporatized water utility; funding infrastructure rehabilitation and expansion; and subsidizing household connections to the water and sewer networks. The reforms were expected to increase government and donor investment in the WASH sector. The project was based on the theory that increasing access to piped water would lead to increases in household productivity, particularly for poor households, by reducing the cost and time spent collecting water and increasing the amount of water consumed.

MCC SECTOR
Water, Sanitation and Hygiene (WASH)

Sampling

Sampling Procedure

The 2018 interim survey, a repeated cross-section of a 2011 compact baseline survey, is based on a randomly selected sample of 998 households that will be representative of the the island of Santiago's population once weights are applied. The interim survey used as a sampling frame the same 2010 census enumeration areas (EAs) that were used in the 2011 survey, with updated household counts. We identified EAs where FASA projects were located based on information provided to us by MCA-CV. We randomly selected 50 EAs with FASA projects and 50 EAs without, with the probability of selection within each of the two groups proportional to the number of households in each EA.We did not have a full census from which to randomly select households, so within each sampled EA, we used the random route approach to select households. Enumerators were given a starting point, a direction, and a randomly generated number N. Enumerators then surveyed every Nth household until they had surveyed 10 households in each EA. Enumerators were instructed to find an appropriate respondent, defined as someone who lives in the house and knows about water usage and billing (if the household receives a bill) at each house. If no such person was available-or if noone was home-enumerators were instructed to return up to three times to find a respondent. If, after three attempts, they were unable to find an appropriate respondent, they added a new household, continuing to use the random route approach. Despite repeated instructions to the data collection firm to carefully track survey refusals, the response rate delivered by the firm seems implausibly high: of 1,006 households targeted, 999 agreed to be surveyed. Because EAs were selected with probability proportional to the number of households, the sample was weighted only to correct for oversampling of certain EAs and for the varying completion rates in each EA.

For the 2018 FAS follow-up survey, we attempted to include all Santiago households that we could identify on the implementing NGOs' beneficiary lists who had been interviewed in the 2015 FAS baseline survey, regardless of whether the household was expected to be a beneficiary or a comparison household at the time of the 2015 survey. Our sampling frame included 786 households, of which 7 percent were in the intended comparison group. The target sample size for the 2018 follow-up survey was 435 dwellings, based on power calculations aimed at detecting changes between 2015 and 2018 in water consumption and in the time spent collecting water. We initially drew a simple random sample of 435 beneficiaries from the list of names we were able to match between the baseline data and the implementing NGOs' beneficiary lists; however, because the data collector was unable to find many selected households, we drew additional households to reach the target. Ultimately, we attempted to survey 570 households, and 425 surveys were completed.

Weighting

For the 2018 interim survey, census enumeration areas (EAs) were selected with probability proportional to the number of households, so the sample was weighted only to correct for oversampling of certain EAs and for the varying completion rates in each EA.

Questionnaires

No content available

Data Collection

Data Collection Mode

For the interim data collection, Mathematica partnered with Afrosondagem, a local data collection firm in Cabo Verde. Mathematica worked closely with Afrosondagem to train both qualitative and quantitative enumerators and oversee the data collection process. The primary qualitative data collection included key informant interviews and focus group discussions with project implementing staff, stakeholders, individuals at government relevant ministries, as well as program beneficiaries. The qualitative data enable us to explore how, why, where, and for whom the estimated changes in outcomes took place at the end of compact. We also viewed the same data through the lens of a political economy analysis to understand how the agents, institutions, and enabling environment interacted to facilitate or hinder the reform process. The primary quantitative data collection included a representative households survey on Santiago and a household survey from beneficiaries who received subsidized connections to the piped water network on Santiago (FAS beneficiaries). Most questions in these surveys were based on questions that were either in the 2011 baseline survey or in the 2015 FAS baseline survey The surveys collected information on the following domains: 1)identifying information, household demographic and socioeconomic characteristics; 2) water sources and practices; 3) sanitation facilities and practices; 4) piped water and sewer service; water and sewer billing; 5) water and sanitation messages and groups; 6) health outcomes; 7) water meter observation and consent to access billing records and meters. Additionally, we collected water meter data for a convenience sample of households in the city of Praia on Santiago.

Data Processing

No content available

Data Appraisal

No content available